

**ABSTRACT**

The present invention relates to a method for removing neoplastic cells from a mixed cellular composition, which is outside of a living organism, by using a virus which selectively infect and kill neoplastic cell. A variety of viruses can be used in this method to remove neoplastic cells for different purposes, for example, to purge hematopoietic stem cells prior to transplantation. Also provided are compositions prepared according to this method, and kits comprising a combination of viruses which are useful in this invention.